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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,735	08/31/2001	Horst-Udo Hain	1454.1080	8401

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EXAMINER

AZAD, ABUL K

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,735

Applicant(s)

HAIN, HORST-UDO

Examiner

ABUL K. AZAD

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/31/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the communication filed on April 4, 2004.
2. Claims 1-27 are pending in this action. Claims 1, 8, 15, 22 have been amended.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-5, 7, 8, 10-12, 14, 15, 17-19, 21, 22 and 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Sabourin (US 6,108,625).

As per claim 1, Sabourin teaches, "a method for grapheme-phoneme conversion of a word which is not contained as a whole in a pronunciation lexicon", comprising:

"decomposing the word into subwords" (col. 4, line 38 to col. 5, line 11);

"performing grapheme-phoneme conversion of the subwords to obtain transcriptions of the subwords" (col. 5, lines 31-40);

"sequencing the transcriptions of the subwords are sequenced to produce at least one interface between the transcriptions of the subwords" (col. 5, lines 55-60);

"determining phonemes of the subwords bordering on the at least one interface" (col. 6, line 28 to col. 7, line 14);

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“determining graphemes of the subwords which generate the phonemes bordering on the at least one interface between the subwords as a function of the context of the at least one interface” (col. 6, line 28 to col. 7, line 14); and

“recalculating grapheme-phoneme conversion of the graphemes bordering on the at least one interface” (col. 6, line 28 to col. 7, line 14).

As per claim 3, Sabourin teaches, “wherein said recalculating is performed using a lexicon” (col. 6, line 28 to col. 7, line 14).

As per claim 4, Sabourin teaches, “wherein said decomposing includes searching for the subwords of the word in a database containing phonetic transcriptions of words, and wherein said performing includes selecting a phonetic transcription recorded in the database for each subword found in the database” (col. 4, line 38 to col. 5, line 11).

As per claim 5, Sabourin teaches, “wherein in addition to the subword, the word has at least one further constituent which is not recorded in the database, and wherein said method further comprises phonetically transcribing the at least one further constituent by an out-of-vocabulary method” (col. 5, lines 1-11).

As per claim 7, Sabourin teaches, wherein the word is decomposed into subwords of a predefined minimum length” (col. 4, lines 38-62).

As per claims 8,10-12, 14, 15, 17-19, 21, 22, and 24-27, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 1, 3-5 and 7.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 6, 9, 13, 16, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sabourin (US 6,108,625) as applied to claims 1, 5, 8, 12, 15, 19 and 22 above, and further in view of Karaali et al. (US 5,913,194).

As per claims 2, 6, 9, 13, 16, 20 and 23 Sabourin does not explicitly teach, text-to-speech conversion performed by a neural network. However, Karaali teaches, text-to-speech conversion performed by a neural network (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use neural network because Karaali teaches his invention to reduce size of the neural network without substantial degradation in the quality of the generated synthetic speech (col. 2, lines 8-12).

Response to Arguments

7. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

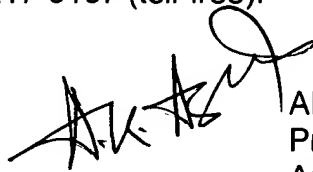
Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ABUL K. AZAD** whose telephone number is (571) 272-7599. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHEMOND DORVIL** can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'A.K. Azad', with a large, stylized flourish at the end.

ABUL K. AZAD
Primary Examiner
Art Unit 2654

June 21, 2005